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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,990

12/10/2003

Myeong-Ha Kim

4464-114 US

5861

7590

03/11/2005

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EXAMINER

GIBSON, ROY DEAN

ART UNIT

PAPER NUMBER

3739

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

5P

<b>Office Action Summary</b>	<b>Application No.</b> 10/731,990	<b>Applicant(s)</b> KIM, MYEONG-HA	
	<b>Examiner</b> Roy D. Gibson	<b>Art Unit</b> 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/10/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: on page 7, in line 23, the correct element no. for the controller is 110, not 140.

Appropriate correction is required.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: in line 4, "have" should be "having" and in line 9, "an" after having should be deleted.

Furthermore, the term "circulator" in claim 1, is objected to because it does not properly represent the elements recited in page 7 of the specification, namely the combination of a power switch, a function selection switch and a display.

Appropriate correction is required.

For purposes of this examination, the examiner has called the "circulator" a temperature control device.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gibbs et al. (5,871,526). Gibbs et al. disclose a mask comprising:

a face mask formed to be a shape corresponding to a user's face using flexible plastic material (polyurethane and see Figures 6B, 17 and 23);

a pack (the interior and back sheet of the pad mask) having a shape corresponding to that of the face mask and is attached on an inner surface of the face mask, the pack is formed with a path in which a predetermined circulation medium circulates;

a circulator (temperature control device, TCD) controlling cooling and heating of the circulation medium by using a thermoelectric element (11); and

a tube (Figures 1, 2 and 3b) having an one end connected to the pack and the other end connected to the circulator (TCD), the tube allowing the circulation medium to flow in the pack, circulate in the path, and flow out of the pack (col. 6, line 6-col. 7, line 34 and col. 10, line 54-col. 11, line 64).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gibbs et al. in view of Pasternack (4,405,348). Gibbs et al. disclose various heat transfer liquids

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(col. 6, lines 40-45), but fail to specifically disclose the circulation medium is silicon oil. But, Pasternack discloses a cooling device for heat protective suits (cooling vest) contains a circulating liquid agent, such as silicon oil (col. 1, lines 30-36 and col. 3, lines 5-18). Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the device of Gibbs et al., as taught by Pasternack, to provide an alternative equivalent heat transfer liquid to be circulated to the face mask for cooling or heating the patients face.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gibbs et al. Gibbs et al. further disclose a pump (10), a fan (13) and a controller (200) but do not specifically disclose a fan heater generating heat via a hot wire and blowing the heated air to the thermoelectric element to prevent dew on the element in an initial operation. However, the requirement for the fan heater is a result of the design of this part of the system and the design of Gibbs et al. is such that the fan heater is not required. Therefore, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide or not provide the fan heater, as required by the component selection and insulation.

Further to claim 4, Gibbs et al. disclose temperature of the circulating medium can be controlled typically between 70-80 °F (21-27 °C), which falls within the claimed range (col. 15, lines 4-60).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nablsi (2004/0249427) discloses a medical cooling device such as a face mask (Figure 3b) and the associated temperature control system with fan, pump, etc.; Fuller (2004/0237969) disclose a therapeutic device in the form of a face mask [0060] as opposed to a pair of goggles; and Morris (1,627,523) discloses a face mask to provide heat or cold to the user.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy D. Gibson whose telephone number is 571-272-4767. The examiner can normally be reached on M-F, 7:30 am-4:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Roy D. Gibson  
Primary Examiner  
Art Unit 3739

March 9, 2005